HW3-577

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#Question 1 # ai)The test statistic value is 1297.7 # aii) numerator and denominator degrees of freedom # aiii) The p-value associated with the test is p-value < 2.2e-16 # aiv) your conclusion at $ $ level of significance. p-value < 2.2e-16 which is significant at $ $ level,so we accept the alternative hypothesis: true location is not equal to c(145,165,195,190) # b)

#read the BearGrowth data  
setwd("D:/LianZuo/Applied Statistics Course Materials/STAT 577 - Applied Multivariate Statistics/data-577")  
BearGrowth <- read.table("BearGrowth.dat")  
#rename the colnames  
colnames(BearGrowth) <- c("weght1","weight2","weight3","weight4","length1","length2","length3","length4")  
# the null hypothesis is u=[145,165,195,190]'  
# using the Hotelling's Test  
BGrowth <- BearGrowth[,5:8]  
#HotellingsT2(BGrowth,mu=c(145,165,195,190),test = "chi")

# Question2

ai)Name the test you will be using here. aii)The test statistic value aiii)the numerator and denominator degreee of freedom. aiv)the p-value associated with the test. av)your conclusion at level of significance. b) c) d) e)

# Question3

i)null hypothesis ii)alternative hypothesis iii)Test statistic value iv)p-value associated with the test v)your conclusion at level of significance.